



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,956	09/12/2003	Matthew Bargo II	ZH380/95001 (fiberglass/r	6325
27868	7590	09/01/2006	EXAMINER	
JOHN F. SALAZAR			DAVIS, JENNA L	
MIDDLETON & REUTLINGER				
2500 BROWN & WILLIAMSON TOWER			ART UNIT	
LOUISVILLE, KY 40202			PAPER NUMBER	
			1771	

DATE MAILED: 09/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/660,956	Applicant(s) BARGO, MATTHEW	
	Examiner Jenna Davis	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) 38-43 and 51-54 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37, 44-50, 55 and 56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/12/03 & 1/12/04</u> . | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

Applicant's election of Group I, claims 1-37, 44 to 50, and newly added claims 55 and 56 in the reply filed on April 20, 2006, is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 38 to 43 and 51 to 53 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on April 20, 2006.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 to 37, 44 to 50, 55 and 56 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 16, 17, 18, 21, 32, 37, 44, 55, and 56 all recite "a co-binder." This renders the claims indefinite as to scope and meaning as it seems to infer that another binder is present in the claimed articles. Clarification is required.

Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 21 employs Markusch language to describe the “co-binder” that is claimed however the group recited is improper as the claim does not express a genus as a group. The inclusion of the physical forms of the co-binder (powder, latex, oil base, solvent base, and liquid polymer) along with particular types of polymeric materials (epoxy resins, vinyl esters, urethane silicones, cross-linkable plastic polymers, and cross-linkable rubber polymers) renders the claim indefinite as to scope and meaning and falls outside of the bounds of the principle defined by *Ex parte Markusch*, 1925 C.D. 126 (Comm’r Pat. 1925).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 9, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent 5,272,000 to Chenoweth.

Chenoweth teaches an article such as an automobile headlines “and other sound and heat insulating complexly shaped panels” (column 6, lines 59-61) which is comprised of an organic man-made fiber -14- such as polyester, an inorganic man-made fiber -12- such as fiberglass, a binder -18- such as a phenolic resin, a cellulose material -16- such as wood fibers in a homogeneous mixture (col. 4, lines 1-6). The Chenoweth material also includes a polymeric film -36- affixed thereto (col. 7, lines 18-45).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 6-8, 10, 13-19, 21-23, 25, and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chenoweth.

The teachings of Chenoweth are set forth above. Chenoweth suggests the use of polyester fibers. The patentee also teaches that the polyester fibers should be from one quarter to four inches in length (col. 4, lines 20-40) thus rendering the range of 5 to 60 millimeters of claim 3 obvious to a person having ordinary skill in the art at the time the present invention was made.

As to claims 6, 7, 13, 14, 16, 17, 18, 19, 22, and 23 Chenoweth shows in Table 1 in column 5 that the various fibers and binders can be successfully provided in the percentages by weight that at least overlap the ranges claimed in the present application. A person having ordinary skill in the art at the time the present invention was made would have found it obvious to have provided the fibers and binder in the amounts presently claimed as the use of the materials suggested by the patentee in amounts expressly suggested by the reference with the reasoned expectation of successfully providing a sound insulating material of the type taught by the reference.

As to claim 8, Chenoweth teaches in column 4, lines 20-40 to provide synthetic fibers with a denier from 1 to 15 which overlaps the denier range claimed and renders

the claimed range obvious as the use of fibers of the type expressly suggested by the patentee. As to claim 10, at column 4, lines 7-18, the reference expressly suggests the use of rotary fiberglass with a diameter that overlaps the range claimed here. With regard to claim 15, Chenoweth teaches in column 4, lines 7-18 to provide rotary fiberglass fibers in lengths and with diameters that at least overlap the claimed ranges and would have rendered the claimed ranges obvious as the use of fiberglass fibers of the type expressly suggested by the patentee.

As to claim 21, at column 5, lines 10-26, Chenoweth expressly suggests the use of an epoxy as the binder thus rendering the claim obvious as the use of a known means for its intended and desired function as expressly suggested by the patentee.

As to claim 25, at column 4, lines 41-68, the reference expressly suggests the use of cellulosic fibers having diameters and lengths that overlap what is claimed. The use of cellulosic fibers of the size claimed would have been obvious as the use of a known means for its intended and desired function as expressly suggested by the patentee.

As to claims 29-31, at column 7, lines 18-45, the reference expressly suggests the use of a spun bonded polyester as the material of layer 36. Provision of any such polyester fabric layer would have been obvious as the use of a known means for its intended and desired function as expressly suggested by the reference.

Claims 4, 5, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chenoweth as applied to claims 1-3, 6-10, 13-19, 21-23, 25, 26, 29 and 30 above, and further in view of US patent 6345688 to Veen.

The teachings of Chenoweth are set forth above. While Chenoweth suggest the use of polyester fibers in his article, he does not require the polyester to be either virgin or reclaimed polyester as set forth in claims 4 and 5.

Like Chenoweth, Veen teaches a sound absorbing material composed of a fibrous batt -12- of virgin or recycled polyester fibers at column 3, lines 1-10. The use of such known fibers in the sound absorbing material of Chenoweth would have been obvious to a person having ordinary skill in the art as the use of a known means for its intended and desired function.

As to claim 27, Veen provides his sound absorbing material with a porous polyethylene film-14- to enhance the sound absorbing qualities of the material. See column 3, lines 26-48. To have provided such a film to the material of Chenoweth in order to gain this art recognized advantage would have been obvious to a person having ordinary skill in the art at the time the present invention was made.

Claims 11, 12, 32, 44, 45, 46, 49, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chenoweth as applied to claims 1-10, 13-19, 22, 23, 25, 26, 27, 29 and 30 above, and further in view of US patent 3773485 to Corsentino.

The teachings of Chenoweth are set forth above. While Chenoweth teaches the use of fiberglass, the reference is not specific as to the particular nature of the fiberglass material, but clearly teaches the size of the glass fibers to overlap what is claimed here. As shown by Corsentino it was known in the art to provide such fiberglass of the type claimed here to make improved insulating materials. As such, the use of such well-known types of fiberglass would have been obvious to a person having ordinary skill in

the art as the use of a known means for its intended and desired function with the reasoned expectation of providing a useful sound absorbing material.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chenoweth in view of Veen as applied to claim 19 above, and further in view of US patent 3054714 to Johnston.

The teachings of Chenoweth and Veen are set forth above. While both Chenoweth and Veen expressly suggest the use of phenolic binders in their products, neither requires the phenolic to be phenol formaldehyde. As evidenced by Johnston, it was old and well known in the art of sound absorbing articles to use phenol formaldehyde binders in such materials. The use of the phenol formaldehyde of Johnston as the phenolic resin suggested by Chenoweth and Veen would have been obvious to a person having ordinary skill in the art as the use of a known expedient for its intended and desired function.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chenoweth in view of US patent 6109389 to Hiers.

The teachings of Chenoweth are set forth above. While Chenoweth suggests adding particulates to his sound absorbing article, the reference fails to teach providing about 15 percent by weight of kaolin clay. As shown by Hiers at column 10, line 43 to column 11, line 7, it was known in the acoustical insulation art to provide kaolin clay to increase the density of such products and thus enhance their sound absorbing ability. Thus to have provided kaolin clay to the Chenoweth material in order to gain this advantage would have been obvious to a person having ordinary skill in the art.

Claims 28 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chenoweth in view of US published patent application 20020096278 to Foster.

The teachings of Chenoweth are set forth above. Chenoweth does not teach including boric acid in this sound absorbing material. As shown by Foster in paragraph [0026], it was known in the art of acoustical materials to include boric acid to provide fire-retardency. To have provided this known additive in order to obtain its intended and desired function would have been obvious to a person having ordinary skill in the art.

Claims 33-36, 47, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chenoweth in view of Corsentino as applied to claims 32 and 44 above, and further in view of Veen.

The teachings of Chenoweth and Corsentino are set forth above. While Chenoweth suggests providing film -36- to his sound absorbing article he does not require the material to be made of any particular material. As shown by Veen in column 3, lines 1-47, provision of perforated films of various materials including thermosetting materials and polyolefins was known to enhance the sound absorbing properties of such materials and as such would have been obvious to a person having ordinary skill in the art. As to claim 47 at column 3, lines 1-25, Veen teaches making such materials in a thickness of 5-30 mm. Since Veen shows that materials of this thickness are useful for sound absorbing, it would have been obvious to have provided the material of Chenoweth as modified by Corsentino at this thickness with the reasoned expectation of providing a useful sound absorbing material.

Art Unit: 1771

Claims 55 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chenoweth in view of Corsentino and further in view of US patent 5068001 to Haussling.

The teachings of Chenoweth and Corsentino are set forth above. Neither reference requires the sound absorbing materials taught therein to inhibit sag at high temperatures. As disclosed by Haussling at column 4, lines 30-40, prevention of sag is a known problem in the art of sound absorbing materials and can be overcome by providing such materials with more glass fibers to the materials. To have provided this property to the materials of Chenoweth as modified by Corsentino in order to overcome the problem of high temperature sag would have been obvious to a person having ordinary skill in the art at the time the present invention was made as the use of a known solution to an art recognized problem.

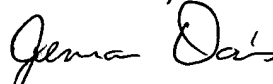
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna Davis whose telephone number is 571-272-3357. The examiner can normally be reached on Monday to Friday 9 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1771

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



/Jenna Davis/

Jenna Davis
Primary Examiner
Art Unit 1771

jd
August 30, 2006